

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A sheet deceleration apparatus for reducing the speed of a sheet of material moving along a travel path at a first speed, said apparatus comprising:

a first rotatable roller being rotatable about a first axis, said first axis being substantially perpendicular to the travel path and said first roller being positioned on one side of the travel path;

a second rotatable roller being rotatable about a second axis, said second axis being substantially perpendicular to the travel path and said second roller being positioned on the other side of the travel path and spaced from said first roller so that the sheet of material can pass between said first and second rollers wherein one of said first and second rollers is driven and the other of said first and second rollers is not driven; and

at least one of said first and second rollers being moveable relative to and toward the other of said first and second rollers to nip the sheet between said first and second rollers during at least a portion of the travel of the sheet past said first and second rollers wherein said at least one roller is moveable between a retracted position in which said at least one roller is sufficiently spaced from the other roller so as to not nip the sheet of material and an extended position in which said at least one roller is moved toward the other roller a distance sufficient to nip the sheet of material; and

a drive mechanism comprising a servo drive for moving said at least one roller from said retracted position to said extended position and for moving said at least one roller from said extended position to said retracted position.

2. (Cancelled)
3. (Cancelled)
4. (Currently Amended) The apparatus of claim 3 1 wherein said other roller is moveable toward said one roller.
5. (Cancelled)
6. (Currently Amended) The apparatus of claim 1 wherein said at least one rollers is reciprocally moveable toward and away from the other ~~of said first and second~~ rollers.
7. (Currently Amended) The apparatus of claim 6 1 including wherein said servo drive includes a servo motor and a drive linkage assembly between said servo motor and said at least one roller to reciprocally move said one roller.
8. (Currently Amended) The apparatus of claim 1 wherein ~~said first~~ the driven roller comprises a plurality of first laterally spaced driven rollers and ~~said second~~ the non-driven roller comprises a plurality of second laterally spaced non-driven rollers.
9. (Currently Amended) A combination sheet stacking and deceleration apparatus comprising:
 - an entry conveyor for delivering sheets of material along a travel path toward a discharge end of said conveyor;
 - a stacking hopper positioned downstream from the discharge end of said entry conveyor; and
 - a sheet deceleration apparatus positioned between the discharge end of said entry conveyor and said stacking hopper, said sheet deceleration apparatus including a ~~first~~ driven roller assembly comprised of a plurality of laterally spaced driven rollers positioned below the travel path and a ~~second~~ non-driven roller assembly comprised of a

plurality of laterally spaced non-driven rollers positioned above the travel path, at least one of said first and second said driven rollers being mounted on a driven shaft and said non-driven rollers being moveable toward and away from the other of corresponding ones of said driven rollers between a retracted position in which said at one roller is sufficiently spaced from the other roller so as to not nip the sheet of material and an extended position in which said at least one roller is moved toward the other roller a distance sufficient to nip the sheet of material ~~second rollers to nip a sheet passing between said first and second rollers.~~

10. (Original) The apparatus of claim 9 wherein said entry conveyor is a belt conveyor.

11. (Cancelled)

12. (Currently Amended) The apparatus of claim ~~11~~ 9 wherein said entry conveyor delivers said sheets at a line speed and wherein said ~~one driven rollers~~ is are driven at a speed less than said line speed.

13. (Cancelled)

14. (Currently Amended) The apparatus of claim 9 including a drive mechanism comprising a servo motor and a drive linkage between said servo motor and said at least one roller for moving said at least one non-driven roller assembly.

15. (Currently Amended) A method for decelerating a sheet of material traveling along a travel path at a line speed, said method comprising:

delivering said sheet of material between ~~first and second rollers~~ a driven roller and a non-driven roller, said ~~first and second~~ driven and non-driven rollers being rotatable on first and second axes, respectively, said first and second axes being substantially perpendicular to said travel path and parallel to one another; and

~~moving~~ driving at least one of said ~~first and second~~ driven and non-driven rollers toward the other ~~of said first and second rollers~~ with a servo drive to nip said sheet of material during at least a portion of the sheet travel between said ~~first and second~~ rollers, said servo drive comprised of a servo motor and a drive linkage positioned between said servo motor and said at least one roller.

16. (Currently Amended) The method of claim 15 including driving ~~one of said first and second~~ said driven rollers at a speed less than said line speed.

17. (Original) The method of claim 15 including delivering a series of sheets of material along said travel path at a line speed wherein each of said sheets includes a leading edge and a trailing edge and wherein said series of sheets are spaced from adjacent sheets in the travel path to define a gap between the trailing edge of one sheet and the leading edge of an adjacent following sheet.

18. (Currently Amended) The method of claim 17 including ~~moving~~ driving said at least one roller away from said other roller with said servo drive after nipping said sheet of material to permit delivery of the adjacent following sheet between said ~~first~~ driven and ~~second non-driven~~ rollers and further including synchronizing the delivery of said series of sheets and the ~~moving~~ driving of said at least one roller so said at least one roller moves toward said other roller and away from said other roller during the travel of each sheet between said ~~first~~ driven and ~~second non-driven~~ rollers.

19. (Original) The method of claim 18 including forming said sheets of material on a rotary press prior to said delivering step.

20. (Currently Amended) The method of claim 19 ~~including moving said at least one roller toward and away from said other roller utilizing a servo motor and~~ wherein said synchronizing step includes controlling the actuation of said servo ~~motor~~ drive in response to the rotation of said rotary press.

21. (New) The apparatus of claim 1 wherein said at least one roller is the non-driven roller and comprises a plurality of laterally spaced non-driven rollers each rotatable about a first rotation axis and wherein said drive linkage includes a pivot shaft pivotable about a pivot axis, said pivot axis being parallel to said first rotation axis and said first rotation axis and said plurality of spaced non-driven rollers being pivotable about said pivot axis between said retracted and said extended positions.

22. (New) The apparatus of claim 21 wherein the driven roller comprises a plurality of laterally spaced driven rollers.

23. (New) The apparatus of claim 9 wherein said non-driven rollers are spaced from and connected with a common pivot shaft.

24. (New) The apparatus of claim 24 including a servo drive to rotate said pivot shaft to move said non-driven rollers between said retracted and extended positions.

25. (New) The method of claim 15 including controlling the driving of at least one of said driven and non-driven rollers by controlling the rotational profile of said servo drive.